

AD-A134 498

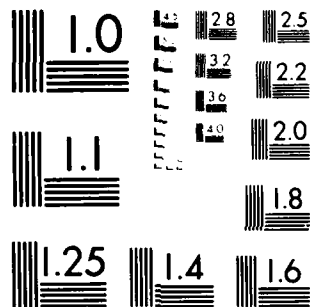
14818A LANCE MISSILE NUMBER 4587 ROUND NUMBER 390 APL  
22 SEPTEMBER 1983(U) ARMY ELECTRONICS RESEARCH AND  
DEVELOPMENT COMMAND WSMR NM ATM.. D C KELLER 22 SEP 83  
ERADCOM/ASL-DR-1317

1/1

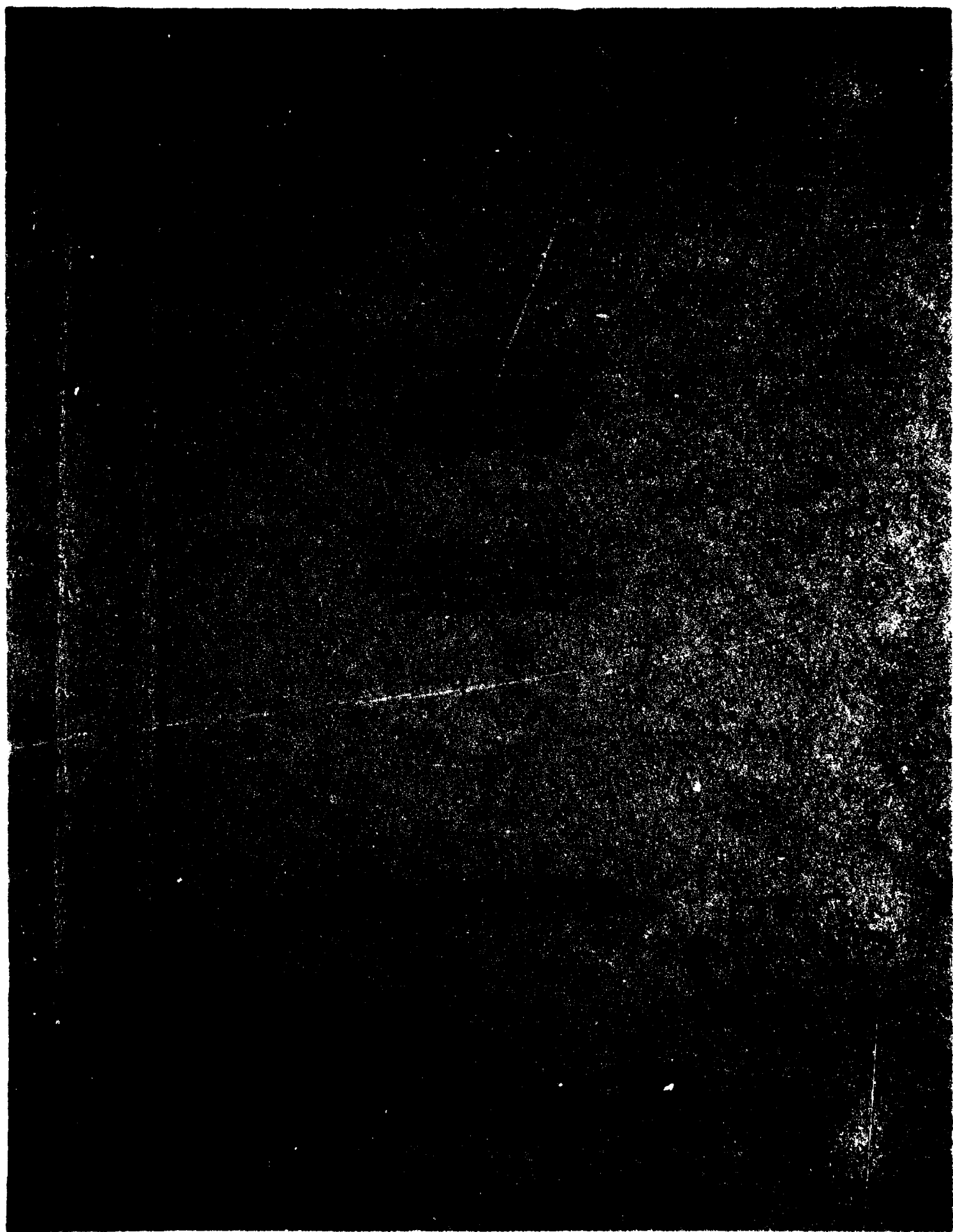
F/G 4/2

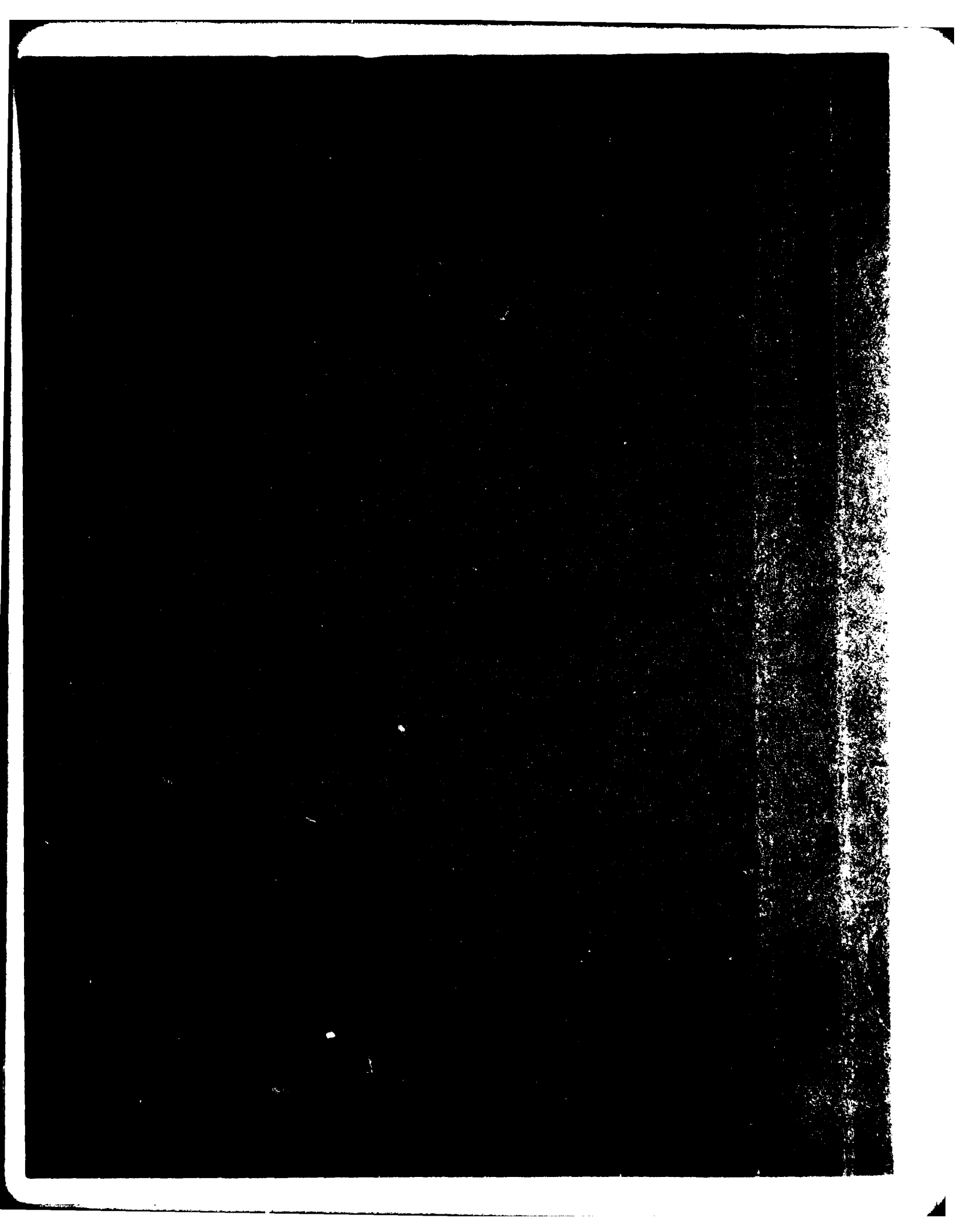
NL

END  
DATE  
FILMED  
11-83  
DTIC



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A





REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1317 ✓	2. GOVT ACCESSION NO. AD A134498	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 14818A Lance Missile Number 4587 Round Number 390 APL		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(s) White Sands Meteorological Team		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS		8. CONTRACT OR GRANT NUMBER(s) DA Task 1F665702D127-02
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research and Development Cmd Adelphi, MD 20783		12. REPORT DATE 22 Sep 83
		13. NUMBER OF PAGES
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 14818A Lance, Missile Number 4587, Round Number 390 APL are presented in tabular form.		

CONTENTS	PAGE
INTRODUCTION-----	1
DISCUSSION-----	1
GENERAL AREA MAP-----	2
TABLES:	
1. Surface Observation Taken at 2130 MDT at LC-39-----	3
2. Pilot-Balloon Measured Wind Data Taken at 2105 MDT at LC-36-----	4
3. Pilot-Balloon Measured Wind Data Taken at 2125 MDT at LC-36-----	5
4. T-Time Computer Met Message Data-----	6
5. WSD Significant Level Data Taken at 2230 MDT-----	7
6. WSD Upper Air Data Taken at 2230 MDT-----	9
7. WSD Mandatory Levels at 2230 MDT-----	15
8. SMR Significant Level Data at 2130 MDT-----	16
9. SMR Upper Air Data Taken at 2130 MDT-----	17
10. SMR Mandatory Levels at 2130 MDT-----	20

## INTRODUCTION

14818A Lance, Missile Number 4587, Round Number 390-APL, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 2129:20 MDT, 22 Sep 83. The scheduled launch time was 2100 MDT.

## DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

### 1. Observations

#### a. Surface

(1) Standard surface observations to include pressure, temperature ( $^{\circ}\text{C}$ ), relative humidity, dew point ( $^{\circ}\text{C}$ ), density ( $\text{gm}/\text{m}^3$ ), wind direction and speed, and cloud cover were made at the LC-39 Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

#### b. Upper Air

(1) Low level wind data were obtained from RAPT5 T-9 pibal observation at:

### SITE AND ALTITUDE

LC-36 2760 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

### SITE AND TIME

WSD 2230 MDT  
SMR 2130 MDT



A1

# WSMR METEOROLOGICAL SITES

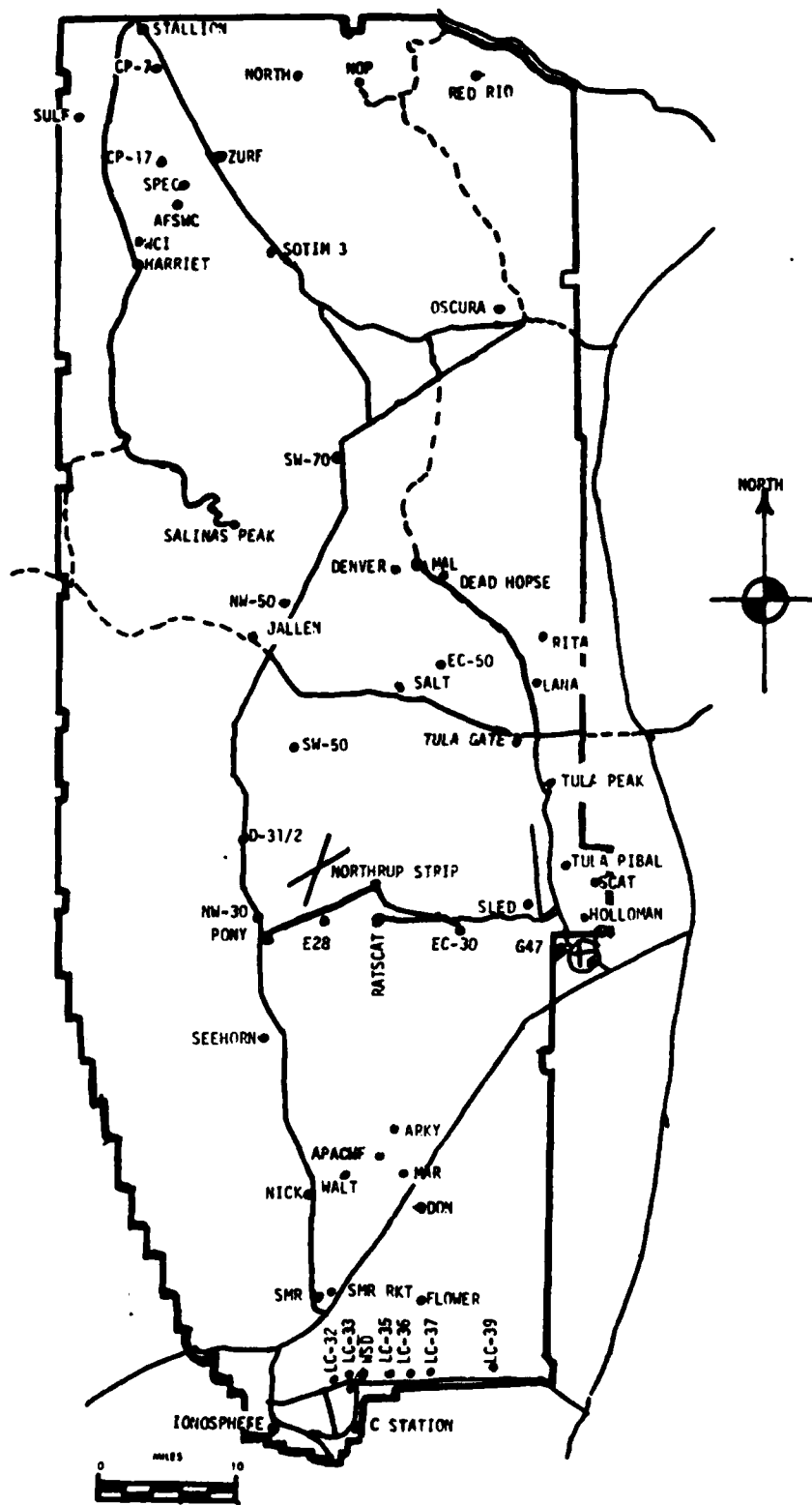




TABLE 1

## PSYCHROMETRIC COMPUTATION

TABLE GC		STATION LC-39									
DATE 22 Sep 83		Y= 530,938.82		Y= 186,564.96		H= 4063.75					
TIME M D T	PRESSURE INCHES	TEMPERATURE OF GC	DEW POINT OF GC	RELATIVE HUMIDITY %	DENSITY GRAMS PER CC	DIRECTION DEGS IN	WIND SPEED KTS	CHARACTER KTS	VISIBIL- ITY		
2130	881.1	24.4	9.0	38	1028.2		calm		30		

OBSTRUCTIONS TO VISIBILITY	CLOUDS									REMARKS
	1st LAYER			2nd LAYER			3rd LAYER			
	AMT	TYPE	HGT	AMT	TYPE	HGT	AMT	TYPE	HGT	
1	SC	7,000	5	AS	14,000	3	CS	24,000	H ALQDS	

## PSYCHROMETRIC COMPUTATION

TIME: MDT	2130	
DRY BULB TEMP.	24.4	
WET BULB TEMP.	15.0	
WET BULB DEPR.	9.2	
DEW POINT	9.0	
RELATIVE HUMID.	38%	

## WINDS ALOFT DATA

TABLE NUMBER 2

RELEASED FROM: LC-36      DATE 22 Sep 83      TIME 2105      IST      MDT X

UTM COORDINATES: X= 504,466.00 Y= 190,732.16 H= 4037.21

METHOD OF DATA COLLECTION: S/T \_\_\_\_\_ D/T \_\_\_\_\_ T-9 X \_\_\_\_\_ PAOB \_\_\_\_\_ PAWIN \_\_\_\_\_

HEIGHTS: METERS AGL X FEET AGL        METERS ISL        FEET ISL       

HEIGHT	DIRECTION DEGREES	SPEED KTS
SFC	290	10
60	296	11
120	302	12
180	311	11
240	310	11
300	317	11
360	312	10
420	309	09
480	309	07
540	321	07
600	334	06
660	360	05
720	346	03
780		CALM
840	345	04
900	333	03
960	353	02
1020	022	02
1080	123	03
1140	123	04
1200	128	05
1260	137	06
1320	131	07
1380	139	08
1440	145	05
1500	146	06
1560	153	06
1620	158	07

[illegible][illegible]

## WINDS ALOFT DATA

TABLE NUMBER 3

RELEASED FROM: LC-36      DATE 22 Sep 83      TIME 2125      ~~NOT~~ NOT X

!!STM COORDINATES: X= 504,466.00 Y= 190,732.16 H= 4037.21

METHOD OF DATA COLLECTION: S/T \_\_\_\_\_ D/T \_\_\_\_\_ T-9 X \_\_\_\_\_ PAOB \_\_\_\_\_ PAWIN \_\_\_\_\_

HEIGHTS: METERS AGL X FEET AGL METERS ISL FEET ISL

HEIGHT	DIRECTION DEGREES	SPEED KTS
SFC	300	04
60	297	07
120	331	08
180	341	08
240	342	07
300	326	06
360	330	05
420	332	06
480	334	05
540	339	05
600	349	05
660	360	04
720	004	04
780	041	05
840	057	04
900	067	03
960	066	05
1020	072	04
1080	067	05
1140	070	04
1200	065	06
1260	092	05
1320	098	07
1380	112	07
1440	123	06
1500	127	06
1560	134	06
1620	132	06

[illegible][illegible]

TABLE 4

AIMING AND T-TIME COMPUTER MET MESSAGES  
22 September 1983

## WSD 2130 MDT

METCM1324064

230350122883

00533004	29850883
01565013	30090873
02547011	29980848
03619002	29670810
04212003	29270765
05381002	28800721
06342004	28320679
07519008	27900639
08558012	27510601
09551013	27140565
10498014	26860530
11482013	26570498
12577011	26120452
13520014	25390396
14495026	24770345
15462035	23990300
16471039	23090260
17493048	22320224
18511055	21670192
19526047	21080164
20514030	20510139
21495024	20040118
22478008	20240099
23500015	20040084
24605017	20670071
25033004	21060060
26000000	21230051

## SMR 2130 MDT

METCM1325064

230350122882

00062007	30210882
01598010	30060872
02568009	29840848
03579004	29510810
04315002	29110764
05292005	28670720
06485003	28240678
07501008	27810638
08565007	27520600
09481012	27190564
10485015	26760529
11537011	26470497
12595010	25990450
13473012	25330394
14498024	24670344
15491031	23920299
16471042	23010259
17491050	22130223
18510061	21580191
19528048	21010162
20511033	20440138

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

SIGNIFICANT LEVEL DATA  
2650020455  
WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
22 SEP. 83  
ASCENSION NO. 455

TABLE 5

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	DEWPOINT DEGREES	REL. HUM. PERCENT
MILLIBARS	MET. FEET	DEGREES	CENTIGRADE	
882.7	3289.0	23.8	10.1	42.0
877.6	4156.2	26.9	10.5	36.0
850.0	5080.8	25.4	8.4	34.0
757.2	8174.0	17.6	6.2	47.0
700.0	10557.5	11.2	4.0	61.0
667.8	11843.3	7.4	3.1	74.0
652.5	12470.6	6.3	1.8	73.0
633.2	13278.2	4.0	1.0	81.0
629.6	13430.8	3.5	-1.3	71.0
607.2	14395.8	1.8	-2.7	72.0
573.2	15915.8	-1.8	-4.8	80.0
539.4	17499.9	-4.6	-8.2	76.0
522.4	18320.4	-5.6	-10.4	69.0
514.4	18726.7	-5.8	-13.8	53.0
500.0	19456.3	-7.7	-15.1	55.0
482.3	20375.8	-9.8	-13.1	77.0
472.0	20923.2	-10.9	-13.4	82.0
464.1	21350.4	-10.9	-15.4	69.0
450.7	22090.5	-11.8	-16.8	65.0
443.3	22507.0	-12.9	-18.1	65.0
432.4	23129.9	-14.7	-18.8	71.0
413.1	24263.4	-17.0	-20.5	74.0
400.0	25056.2	-19.3	-20.8	88.0
381.9	26185.6	-21.4	-23.1	86.0
356.1	27875.3	-24.1	-29.3	62.0
347.4	28467.9	-25.4	-30.2	64.0
342.9	28774.9	-26.3	-31.9	59.0
329.5	29726.0	-27.4	-34.2	52.0
300.0	31922.7	-33.3	-37.7	64.0
283.4	33229.2	-37.2	-40.2	73.0
277.5	33706.3	-39.0	-42.8	67.0
250.0	36037.6	-44.2		
238.7	37052.6	-47.2		
200.0	40845.0	-54.8		
177.5	43333.6	-59.5		
150.0	46758.5	-65.4		
122.5	50753.3	-72.5		
118.7	51364.2	-72.5		
106.0	53548.5	-74.3		
103.0	54107.6	-69.0		

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

SIGNIFICANT LEVEL DATA

2650020455  
WHITE SANDS

TABLE 5 Con't

STATION ALTITUDE 3989.00 FEET MSL  
22 SEP. 83  
ASCENSION NO. 455

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
110.0	50690.1	-69.5	
70.1	59500.4	-74.2	
70.0	61661.6	-63.9	
50.0	68523.8	-60.8	
41.4	72470.1	-53.5	
30.0	79370.1	-50.4	
20.0	88106.6	-47.2	
14.3	95615.5	-42.5	
11.8	99887.1	-45.7	
10.0	103579.1	-41.1	
8.2	108045.0	-41.8	

GEODLTIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

UPPER AIR DATA  
2650020455  
WHITE SANDS  
TABLE 6

STATION ALTITUDE 3989.00 FEET MSL  
22 SEP. 83  
ASCENSION NO. 455  
2230 MDT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup> METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3989.0	882.7	23.8	42.0	1030.0	673.1	300.0	4.1	1.000283
4000.0	882.4	24.0	41.6	1028.9	673.3	300.2	4.1	1.000283
4500.0	867.2	26.3	35.3	1003.7	675.9	306.5	4.6	1.000275
5000.0	852.4	25.5	34.2	989.3	674.9	311.6	5.1	1.000268
5500.0	837.6	24.4	35.7	975.8	673.7	315.7	5.7	1.000264
6000.0	823.0	23.2	37.6	962.6	672.3	320.1	5.0	1.000261
6500.0	808.7	22.0	39.6	949.7	671.0	337.6	2.1	1.000257
7000.0	794.6	20.9	41.6	936.9	669.6	30.8	1.0	1.000254
7500.0	780.8	19.7	43.5	924.4	668.3	94.6	1.7	1.000250
8000.0	767.2	18.5	45.5	912.1	666.9	119.1	2.4	1.000246
8500.0	753.8	17.2	47.8	900.0	665.4	134.4	3.3	1.000243
9000.0	740.3	15.8	51.0	888.5	663.7	153.0	4.0	1.000240
9500.0	727.1	14.3	54.2	877.2	662.0	166.4	4.5	1.000236
10000.0	714.2	12.8	57.4	866.0	660.3	179.4	3.9	1.000232
10500.0	701.4	11.4	60.6	855.1	658.6	198.8	3.4	1.000229
11000.0	688.7	9.9	65.5	844.0	656.9	227.5	3.2	1.000226
11500.0	676.2	8.4	70.5	833.0	655.1	252.4	3.9	1.000223
12000.0	663.9	7.1	73.8	821.7	653.6	266.9	5.2	1.000219
12500.0	651.8	6.2	73.3	809.5	652.5	282.4	6.5	1.000214
13000.0	639.8	4.8	78.2	798.7	650.8	295.2	8.1	1.000211
13500.0	628.0	3.4	71.1	788.5	648.9	302.6	9.4	1.000203
14000.0	616.3	2.5	71.6	776.4	647.8	307.7	10.6	1.000199
14500.0	604.8	1.6	72.5	764.6	646.7	314.2	11.6	1.000195
15000.0	593.4	.4	75.2	753.6	645.3	322.0	12.6	1.000192
15500.0	582.3	-8	77.8	742.7	643.8	322.2	13.2	1.000188
16000.0	571.4	-1.9	79.8	731.9	642.5	317.1	13.4	1.000185
16500.0	560.5	-2.8	78.5	720.4	641.4	302.4	13.3	1.000181
17000.0	549.8	-3.7	77.3	709.2	640.3	283.7	14.2	1.000177
17500.0	539.4	-4.6	76.0	698.1	639.2	280.8	13.9	1.000173
18000.0	529.1	-5.2	71.8	686.4	638.4	279.2	13.4	1.000169
18500.0	518.9	-5.7	62.1	674.7	637.7	278.9	12.4	1.000163
19000.0	509.0	-6.5	53.7	664.0	636.6	277.4	12.3	1.000159
19500.0	499.1	-7.8	56.0	654.4	635.1	275.0	13.2	1.000156
20000.0	489.5	-8.9	68.0	644.3	633.8	281.9	13.7	1.000155
20500.0	479.9	-10.0	78.1	634.4	632.5	291.3	14.3	1.000153
21000.0	470.6	-10.9	79.7	624.0	631.4	304.7	12.8	1.000151
21500.0	461.4	-11.1	68.4	612.4	631.1	319.4	11.8	1.000146
22000.0	452.3	-11.7	66.4	601.8	630.4	331.9	10.6	1.000143
22500.0	443.4	-12.9	65.0	592.8	628.9	339.3	10.3	1.000140
23000.0	434.7	-14.3	69.7	584.3	627.1	338.5	10.6	1.000138

UPPER AIR DATA  
2650020455  
WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
22 SEP. 83  
ASCENSION NO. 455

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

TABLE 6 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	420.0	-15.5	72.0	575.2	625.8	331.9	10.3	1.000136
24000.0	417.5	-16.5	73.3	566.0	624.5	321.4	10.0	1.000133
24500.0	409.1	-17.7	78.2	557.3	623.0	309.1	10.1	1.000131
25000.0	400.9	-19.1	87.0	549.2	621.2	297.5	11.0	1.000129
25500.0	392.8	-20.1	87.2	540.2	620.0	289.5	14.1	1.000127
26000.0	384.8	-21.1	86.3	531.3	618.9	285.5	17.4	1.000124
26500.0	377.0	-21.9	81.5	522.2	617.8	284.2	20.7	1.000121
27000.0	369.2	-22.7	74.4	513.2	616.8	282.9	22.6	1.000119
27500.0	361.7	-23.5	67.3	504.4	615.7	281.7	23.7	1.000116
28000.0	354.3	-24.4	62.4	495.8	614.6	279.8	24.8	1.000114
28500.0	346.9	-25.5	63.5	487.8	613.2	278.3	25.9	1.000112
29000.0	339.7	-26.6	57.4	479.7	611.9	277.6	27.1	1.000109
29500.0	332.6	-27.1	53.7	470.9	611.2	276.3	28.5	1.000107
30000.0	325.7	-28.1	53.5	462.9	609.9	273.5	30.3	1.000105
30500.0	318.8	-29.5	56.2	455.6	608.2	270.2	32.2	1.000103
31000.0	312.1	-30.8	59.0	448.5	606.6	265.5	34.3	1.000102
31500.0	305.5	-32.2	61.7	441.4	604.9	261.2	35.7	1.000100
32000.0	299.0	-33.5	64.5	434.6	603.1	256.8	35.7	1.000098
32500.0	292.5	-35.0	68.0	427.9	601.3	254.5	35.4	1.000097
33000.0	286.2	-36.5	71.4	421.3	599.4	253.4	35.0	1.000095
33500.0	280.0	-38.2	69.6	415.2	597.2	256.2	35.9	1.000094
34000.0	273.9	-39.7	58.6**	408.5	595.3	259.2	37.1	1.000092
34500.0	267.8	-40.8	44.2**	401.4	593.9	261.8	37.9	1.000090
35000.0	261.9	-41.9	29.8**	394.5	592.5	264.6	38.4	1.000088
35500.0	256.1	-43.0	15.5**	387.6	591.0	267.9	38.7	1.000086
36000.0	250.4	-44.1	1.1**	380.9	589.6	271.1	40.0	1.000085
36500.0	244.8	-45.6		374.7	587.7	274.1	41.9	1.000083
37000.0	239.3	-47.0		368.7	585.8	275.3	45.6	1.000082
37500.0	233.8	-48.1		361.9	584.4	276.0	48.4	1.000081
38000.0	228.4	-49.1		355.1	583.1	276.2	50.0	1.000079
38500.0	223.1	-50.1		348.5	581.8	276.9	49.1	1.000078
39000.0	218.0	-51.1		342.0	580.5	277.8	48.4	1.000076
39500.0	212.9	-52.1		335.6	579.2	279.2	49.0	1.000075
40000.0	208.0	-53.1		329.4	577.9	280.4	50.5	1.000073
40500.0	203.2	-54.1		323.2	576.6	281.9	52.8	1.000072
41000.0	198.5	-55.1		317.1	575.3	284.9	57.2	1.000071
41500.0	193.8	-56.0		311.0	574.0	287.6	58.4	1.000069
42000.0	189.2	-57.0		304.9	572.8	290.2	57.6	1.000068
42500.0	184.7	-57.9		299.0	571.5	291.6	55.2	1.000067
43000.0	180.4	-58.4		293.2	570.3	292.9	54.8	1.000065

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.



STATION ALTITUDE 3989.00 FEET MSL  
22 SEP. 83  
ASCENSION NO. 455 2230 MDT

UPPER AIR DATA  
2650020455  
WHITE SANDS

GEODETTIC COORDINATES  
32-40043 LAT DEG  
106-37033 LON DEG

TABLE 6 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
43500.0	170.1	-59.8		287.4	569.1	294.1	56.4	1.000064
44000.0	171.8	-60.6		281.6	567.9	295.1	56.2	1.000063
44500.0	167.6	-61.5		275.9	566.8	295.8	53.9	1.000061
45000.0	163.5	-62.4		270.3	565.6	296.3	48.0	1.000060
45500.0	159.6	-63.2		264.8	564.4	296.3	41.3	1.000059
46000.0	155.7	-64.1		259.4	563.3	295.8	34.5	1.000058
46500.0	151.9	-65.0		254.2	562.1	293.7	32.5	1.000057
47000.0	148.2	-65.8		249.0	560.9	292.1	31.1	1.000055
47500.0	144.5	-66.7		243.8	559.7	291.4	30.5	1.000054
48000.0	140.8	-67.6		238.7	558.5	290.0	29.5	1.000053
48500.0	137.3	-68.5		233.8	557.3	287.9	28.4	1.000052
49000.0	133.9	-69.4		228.9	556.1	283.4	25.8	1.000051
49500.0	130.5	-70.3		224.1	554.9	277.8	23.6	1.000050
50000.0	127.3	-71.2		219.5	553.7	278.2	25.4	1.000049
50500.0	124.1	-72.0		214.9	552.5	278.4	27.2	1.000048
51000.0	121.0	-72.5		210.0	551.8	279.3	28.7	1.000047
51500.0	117.9	-72.6		204.8	551.7	280.3	30.1	1.000046
52000.0	114.9	-73.0		199.9	551.1	281.1	29.5	1.000045
52500.0	111.9	-73.4		195.2	550.6	281.8	23.3	1.000043
53000.0	109.1	-73.8		190.6	550.0	283.0	17.1	1.000042
53500.0	106.3	-74.3		186.1	549.4	283.1	15.0	1.000041
54000.0	103.6	-70.0		177.6	555.2	283.0	13.1	1.000040
54500.0	101.0	-69.3		172.6	556.2	278.9	12.1	1.000038
55000.0	98.4	-69.8		168.6	555.5	273.1	11.4	1.000038
55500.0	95.9	-70.3		164.7	554.9	261.5	9.4	1.000037
56000.0	93.5	-70.8		160.9	554.2	258.0	7.4	1.000036
56500.0	91.1	-71.3		157.2	553.5	234.5	7.6	1.000035
57000.0	88.8	-71.8		153.6	552.9	249.2	9.1	1.000034
57500.0	86.6	-72.2		150.1	552.2	268.0	10.2	1.000033
58000.0	84.4	-72.7		146.6	551.5	285.8	12.1	1.000033
58500.0	82.2	-73.2		143.3	550.8	290.5	17.0	1.000032
59000.0	80.1	-73.7		140.0	550.2	292.1	22.4	1.000031
59500.0	78.1	-74.2		136.8	549.5	302.8	22.2	1.000030
60000.0	76.1	-71.8		131.8	552.8	314.1	22.2	1.000029
60500.0	74.2	-69.4		127.0	556.0	331.7	18.9	1.000028
61000.0	72.4	-67.1		122.4	559.3	351.1	17.5	1.000027
61500.0	70.6	-64.7		117.9	562.5	357.3	15.6	1.000026
62000.0	68.8	-63.7		114.5	563.8	4.6	13.8	1.000026
62500.0	67.2	-63.5		111.6	564.1	11.6	12.4	1.000025
63000.0	65.6	-63.3		108.8	564.4	18.2	10.9	1.000024

STATION ALTITUDE 3989.00 FEET MSL  
22 SEP. 83 2230 MDT  
ASCENSION NO. 455

UPPER AIR DATA  
2650020455  
WHITE SANDS  
TABLE 6 Con't

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
63500.0	64.0	-63.1		106.1	564.7	18.4	8.3	1.000024
64000.0	62.4	-62.8		103.4	565.0	18.9	5.7	1.000023
64500.0	60.9	-62.6		100.8	565.3	21.8	2.7	1.000022
65000.0	59.4	-62.4		98.2	565.6	93.8	.3	1.000022
65500.0	58.0	-62.2		95.8	565.9	52.4	.8	1.000021
66000.0	56.6	-61.9		93.3	566.2	44.8	1.4	1.000021
66500.0	55.2	-61.7		91.0	566.5	49.3	2.2	1.000020
67000.0	53.9	-61.5		88.7	566.8	51.6	3.0	1.000020
67500.0	52.6	-61.3		86.4	567.1	71.3	2.8	1.000019
68000.0	51.3	-61.0		84.3	567.4	96.6	2.8	1.000019
68500.0	50.1	-60.8		82.1	567.7	101.3	1.4	1.000018
69000.0	48.9	-59.9		79.8	568.9	289.4	.7	1.000018
69500.0	47.7	-59.0		77.6	570.1	284.9	4.1	1.000017
70000.0	46.6	-58.1		75.5	571.3	284.5	8.2	1.000017
70500.0	45.5	-57.1		73.4	572.6	281.9	9.6	1.000016
71000.0	44.4	-56.2		71.3	573.8	278.5	9.9	1.000015
71500.0	43.4	-55.3		69.3	575.0	264.9	6.6	1.000015
72000.0	42.3	-54.4		67.4	576.2	218.4	3.9	1.000015
72500.0	41.3	-53.5		65.6	577.4	181.1	5.6	1.000015
73000.0	40.4	-53.3		64.0	577.7	167.2	8.4	1.000014
73500.0	39.5	-53.0		62.4	578.0	167.2	8.7	1.000014
74000.0	38.5	-52.8		60.9	578.3	168.7	8.5	1.000014
74500.0	37.7	-52.6		59.5	578.6	154.3	7.1	1.000013
75000.0	36.8	-52.4		58.0	578.9	131.3	6.4	1.000013
75500.0	35.9	-52.1		56.6	579.2	116.1	6.9	1.000013
76000.0	35.1	-51.9		55.3	579.5	105.1	7.9	1.000012
76500.0	34.3	-51.7		54.0	579.8	103.0	9.3	1.000012
77000.0	33.5	-51.5		52.7	580.0	102.0	10.7	1.000012
77500.0	32.7	-51.2		51.4	580.3	103.1	10.2	1.000011
78000.0	32.0	-51.0		50.2	580.6	104.4	9.7	1.000011
78500.0	31.2	-50.8		48.9	580.9	105.8	9.0	1.000011
79000.0	30.5	-50.6		47.8	581.2	107.9	8.2	1.000011
79500.0	29.8	-50.4		46.6	581.5	112.6	7.3	1.000010
80000.0	29.1	-50.2		45.5	581.7	117.2	6.3	1.000010
80500.0	28.5	-50.0		44.5	582.0	117.7	5.0	1.000010
81000.0	27.8	-49.8		43.4	582.2	113.3	4.2	1.000010
81500.0	27.2	-49.6		42.4	582.4	97.1	4.7	1.000009
82000.0	26.6	-49.4		41.4	582.7	88.1	5.7	1.000009
82500.0	26.0	-49.3		40.4	582.9	87.5	6.7	1.000009
83000.0	25.4	-49.1		39.5	583.2	86.2	7.9	1.000009

UPPER AIR DATA  
2650020455  
WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
22 SEP. 83  
ASCENSION NO. 455

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LONG DEG

TABLE 6 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup> METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
83500.0	24.8	-48.9		30.5	583.4	84.1	9.2	1.000009
84000.0	24.2	-48.7		37.6	583.6	83.1	10.0	1.000008
84500.0	23.7	-48.5		36.8	583.9	83.2	10.0	1.000008
85000.0	23.2	-48.4		35.9	584.1	84.0	10.3	1.000008
85500.0	22.6	-48.2		35.0	584.3	85.6	11.0	1.000008
86000.0	22.1	-48.0		34.2	584.6	87.9	11.4	1.000008
86500.0	21.6	-47.8		33.4	584.8	91.1	11.5	1.000007
87000.0	21.1	-47.6		32.6	585.0	98.5	12.0	1.000007
87500.0	20.6	-47.4		31.9	585.3	109.3	13.5	1.000007
88000.0	20.2	-47.3		31.1	585.5	117.7	15.1	1.000007
88500.0	19.7	-47.0		30.4	585.9	124.7	16.6	1.000007
89000.0	19.3	-46.7		29.7	586.3	131.8	17.3	1.000007
89500.0	18.8	-46.4		29.0	586.7	140.6	17.2	1.000006
90000.0	18.4	-46.1		28.3	587.1	145.1	16.2	1.000006
90500.0	18.0	-45.7		27.6	587.5	142.2	13.5	1.000006
91000.0	17.6	-45.4		26.9	587.9	134.5	10.6	1.000006
91500.0	17.2	-45.1		26.3	588.3	112.7	8.1	1.000006
92000.0	16.8	-44.8		25.7	588.7	92.1	7.3	1.000006
92500.0	16.5	-44.5		25.1	589.1	95.1	6.7	1.000006
93000.0	16.1	-44.2		24.5	589.5	99.8	6.0	1.000005
93500.0	15.7	-43.8		23.9	589.9	110.4	4.9	1.000005
94000.0	15.4	-43.5		23.3	590.3	118.6	4.6	1.000005
94500.0	15.0	-43.2		22.8	590.8	109.6	6.8	1.000005
95000.0	14.7	-42.9		22.2	591.2	105.7	8.7	1.000005
95500.0	14.4	-42.6		21.7	591.6	105.6	9.1	1.000005
96000.0	14.1	-42.8		21.3	591.3	105.4	8.7	1.000005
96500.0	13.7	-43.2		20.8	590.8	104.4	4.6	1.000005
97000.0	13.4	-43.5		20.4	590.3	99.2	.8	1.000005
97500.0	13.1	-43.9		20.0	589.8	249.7	1.0	1.000004
98000.0	12.8	-44.3		19.6	589.4	255.2	2.6	1.000004
98500.0	12.6	-44.7		19.1	588.9	205.3	2.6	1.000004
99000.0	12.3	-45.0		18.8	588.4	176.0	4.0	1.000004
99500.0	12.0	-45.4		18.4	587.9	159.3	5.6	1.000004
100000.0	11.7	-45.6		18.0	587.7	150.4	7.4	1.000004
100500.0	11.5	-44.9		17.5	588.5	148.6	8.4	1.000004
101000.0	11.2	-44.3		17.1	589.3	147.3	9.4	1.000004
101500.0	11.0	-43.7		16.7	590.1	157.2	10.5	1.000004
102000.0	10.7	-43.1		16.3	590.9	165.7	11.9	1.000004
102500.0	10.5	-42.4		15.8	591.7	174.1	12.4	1.000004
103000.0	10.3	-41.4		15.5	592.5	182.1	13.0	1.000003

STATION ALTITUDE 3989.00 FEET MSL  
22 SEP. 83  
ASCENSION NO. 455

UPPER AIR DATA  
2650020455  
WHITE SANDS

2230 MDT

TABLE 6 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup>	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
103500.0	10.0	-41.2		15.1	593.3	182.0	10.5	1.000003
104000.0	9.8	-41.2		14.7	593.4	175.1	6.6	1.000003
104500.0	9.6	-41.2		14.4	593.3	153.3	3.2	1.000003
105000.0	9.4	-41.3		14.1	593.2	77.4	2.4	1.000003
105500.0	9.2	-41.4		13.8	593.1	43.1	4.2	1.000003
106000.0	9.0	-41.5		13.5	593.0	35.7	5.0	1.000003
106500.0	8.8	-41.6		13.2	592.9			1.000003
107000.0	8.6	-41.6		12.9	592.8			1.000003
107500.0	8.4	-41.7		12.6	592.7			1.000003
108000.0	8.2	-41.8		12.4	592.6			1.000003

STATION ALTITUDE 3949.00 FEET MSL  
22 SEP. 83  
ASCENSION NO. 455 2230 NDT

MANDATORY LEVELS  
2650020455  
WHITE SANDS

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

TABLE 7

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES (TN)	SPEED KNOTS	
850.0	5077.	25.4	8.4	34.	312.3	5.2	
800.0	6813.	21.3	7.5	41.	26.8	1.1	
750.0	8634.	16.8	6.0	49.	139.5	3.5	
700.0	10547.	11.2	4.0	61.	201.6	3.3	
650.0	12560.	6.0	1.7	74.	284.5	6.7	
600.0	14694.	1.1	-3.1	74.	317.6	12.0	
550.0	16972.	-3.7	-7.1	77.	284.2	14.2	
500.0	19429.	-7.7	-15.1	55.	275.2	13.1	
450.0	22095.	-11.9	-17.0	66.	335.3	10.4	
400.0	25014.	-19.3	-20.8	88.	296.6	11.2	
350.0	28237.	-25.0	-29.9	63.	278.9	25.4	
300.0	31858.	-33.3	-37.7	64.	257.6	35.7	
250.0	35958.	-44.2			271.2	40.1	
200.0	40745.	-54.8			283.9	55.6	
175.0	43513.	-60.0			294.3	56.4	
150.0	46631.	-65.4			292.6	31.6	
125.0	50215.	-71.8			278.4	26.6	
100.0	54520.	-69.5			277.1	11.9	
80.0	58841.	-73.7			292.1	22.5	
70.0	61449.	-63.9			359.1	15.1	
60.0	64559.	-62.5			28.9	1.2	
50.0	68265.	-60.8			101.4	1.4	
40.0	72910.	-53.2			166.2	8.7	
30.0	79030.	-50.4			110.8	7.6	
25.0	82945.	-49.0			85.0	8.6	
20.0	87771.	-47.2			119.8	15.5	
15.0	94074.	-43.2			109.6	6.8	
10.0	103016.	-41.1			181.8	10.3	

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3497.30 FEET MSL  
22 SEP. 83  
ASCENSION NO. 209

SIGNIFICANT LEVEL DATA  
P650060209  
S M M  
TABLE 8

GEODETIC COORDINATES  
32.44034 LAT UEG  
106.42307 LONG UEG

PRESSURE		GEOMETRIC	TEMPERATURE		REL. HUM.
MILLIBARS	ALTITUDE		AIR	DEWPOINT	PERCENT
	M/L FEET		DEGREES	CENTIGRADE	
882.1	3797.3		27.0	14.1	45.0
876.0	4198.5		26.4	5.9	27.0
850.0	5067.0		24.1	4.1	27.0
760.4	8225.1		16.6	3.0	40.0
700.0	10516.8		10.5	.8	51.0
624.4	13603.8		2.6	-3.1	66.0
581.6	15486.3		.3	-5.9	63.0
529.0	17057.3		-6.6	-7.5	93.0
500.0	19402.8		-8.5	-11.6	78.0
459.6	21535.2		-13.2	-16.7	75.0
454.1	21837.1		-13.2	-18.2	66.0
424.7	23507.5		-15.7	-20.7	65.0
403.1	24794.5		-19.4	-22.5	76.0
400.0	24983.3		-19.7	-22.8	76.0
386.9	25795.0		-21.2	-24.7	73.0
368.3	26788.1		-23.0	-26.8	59.0
330.3	28944.0		-27.5	-33.5	56.0
322.3	30162.2		-29.4	-37.7	44.0
300.0	31833.0		-33.7	-41.5	45.0
291.7	32478.7		-35.5	-42.2	50.0
277.5	33613.9		-39.2	-43.7	62.0
250.0	35740.6		-44.9		
218.7	38831.1		-53.5		
200.0	40717.3		-55.5		
175.1	43478.8		-60.5		
150.0	46615.5		-65.9		
123.9	50381.5		-72.5		
112.7	52209.1		-74.5		

GEODLTIC COORDINATES  
32.48034 LAT DEG  
106.42307 LON DEG

UPPER AIR DATA  
2650060209  
S M K  
TABLE 9

STATION ALTITUDE 3997.30 FEET MSL  
22 SEP. 83  
ASCENSION NO. 209  
2130 MDT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup> METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3997.3	882.1	27.0	45.0	1016.7	677.3	35.0	7.0	1.000294
4000.0	882.0	27.0	44.8	1016.7	677.3	34.9	7.0	1.000294
4500.0	860.9	25.7	27.0	1006.7	674.8	18.6	5.8	1.000262
5000.0	852.0	24.5	27.0	993.6	673.3	356.9	5.3	1.000257
5500.0	837.1	23.2	28.8	980.3	671.9	334.7	5.7	1.000254
6000.0	822.5	22.0	30.8	967.0	670.6	318.8	6.4	1.000251
6500.0	808.1	20.8	32.9	954.1	669.2	321.4	4.5	1.000248
7000.0	794.0	19.6	35.0	941.3	667.8	327.4	2.5	1.000245
7500.0	780.1	18.4	37.0	928.7	666.4	316.9	.7	1.000242
8000.0	765.5	17.1	39.1	916.3	665.0	163.0	1.2	1.000239
8500.0	752.9	15.9	41.3	904.1	663.5	164.4	3.5	1.000235
9000.0	739.4	14.5	43.7	892.1	662.0	164.7	4.8	1.000232
9500.0	725.2	13.2	46.1	880.2	660.5	164.8	5.1	1.000229
10000.0	713.2	11.9	48.5	868.6	658.9	168.5	3.8	1.000225
10500.0	700.4	10.5	50.9	857.1	657.3	176.7	2.5	1.000222
11000.0	687.6	9.3	53.3	845.3	655.8	232.6	2.3	1.000218
11500.0	675.0	8.0	55.8	833.6	654.3	266.1	4.0	1.000214
12000.0	662.6	6.7	58.2	822.1	652.8	275.6	5.6	1.000211
12500.0	650.4	5.4	60.6	810.8	651.3	280.3	7.1	1.000207
13000.0	638.5	4.1	63.1	799.7	649.7	288.1	7.7	1.000204
13500.0	626.8	2.9	65.5	788.8	648.2	302.2	7.5	1.000200
14000.0	615.1	2.1	65.4	776.3	647.3	310.6	7.8	1.000196
14500.0	603.6	1.5	64.6	763.5	646.5	308.2	7.9	1.000192
15000.0	592.4	.9	63.8	751.0	645.8	299.9	8.0	1.000188
15500.0	581.3	.3	63.2	738.8	645.0	282.2	8.7	1.000185
16000.0	570.3	-1.1	69.2	728.4	643.4	271.5	10.1	1.000182
16500.0	559.4	-2.5	75.3	718.3	641.7	268.1	11.7	1.000180
17000.0	548.8	-3.9	81.4	708.3	640.0	267.8	13.1	1.000177
17500.0	538.4	-5.3	87.4	698.5	638.4	270.9	14.2	1.000175
18000.0	528.1	-6.7	92.6	688.7	636.8	273.8	15.0	1.000172
18500.0	517.9	-7.5	87.4	677.2	635.9	280.1	13.9	1.000167
19000.0	507.9	-8.0	82.2	665.9	635.1	287.4	13.1	1.000163
19500.0	498.1	-8.7	77.9	654.9	634.1	297.8	11.7	1.000159
20000.0	488.3	-9.4	73.0	644.9	632.7	311.3	10.6	1.000156
20500.0	478.8	-10.4	76.5	635.0	631.4	322.4	10.3	1.000153
21000.0	469.4	-12.0	75.0	625.3	630.0	331.5	10.4	1.000150
21500.0	460.2	-13.1	75.0	615.7	628.6	338.0	10.8	1.000147
22000.0	451.1	-14.6	65.9	604.4	628.2	342.5	11.4	1.000143
22500.0	442.2	-16.2	65.6	594.2	627.3	338.1	9.9	1.000140
23000.0	433.4	-17.9	65.3	584.1	626.4	328.7	8.2	1.000137

STATION ALTITUDE 3997.30 FEET MSL  
 22 SEP. 83  
 ASCENSION NO. 209

UNDER AIR DATA  
 2650060209  
 S M H

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

TABLE 9 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup> METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	424.8	-15.7	65.0	574.2	625.4	303.7	7.4	1.000135
24000.0	410.3	-17.1	69.2	565.9	623.7	278.8	8.2	1.000132
24500.0	407.9	-18.6	73.5	557.7	621.9	268.6	9.9	1.000130
25000.0	399.7	-19.7	75.9	549.0	620.5	263.4	11.7	1.000128
25500.0	391.6	-20.7	74.1	539.8	619.3	262.8	13.2	1.000125
26000.0	383.6	-21.5	70.6	530.7	618.2	264.7	14.5	1.000123
26500.0	375.8	-22.3	64.7	521.5	617.3	267.0	16.0	1.000120
27000.0	368.1	-23.0	59.0	512.4	616.3	271.4	18.3	1.000118
27500.0	360.5	-24.2	58.2	504.1	614.9	274.8	20.7	1.000115
28000.0	353.0	-25.3	57.5	496.0	613.4	277.5	22.3	1.000113
28500.0	345.7	-26.5	56.7	488.0	612.0	279.8	23.9	1.000111
29000.0	338.6	-27.6	55.5	480.1	610.6	282.5	24.8	1.000109
29500.0	331.5	-28.4	50.5	471.6	609.6	285.6	25.4	1.000107
30000.0	324.5	-29.1	45.6	463.2	608.6	287.0	26.2	1.000105
30500.0	317.7	-30.3	44.2	455.5	607.2	285.8	27.5	1.000103
31000.0	310.9	-31.6	44.5	448.2	605.6	284.6	28.8	1.000101
31500.0	304.3	-32.8	44.8	441.1	604.0	279.8	30.2	1.000099
32000.0	297.8	-34.2	46.3	434.1	602.3	275.1	32.0	1.000098
32500.0	291.4	-35.6	50.2	427.2	600.5	271.0	33.6	1.000096
33000.0	285.1	-37.2	55.5	420.8	598.5	267.4	35.1	1.000095
33500.0	278.9	-38.8	60.8	414.6	596.4	264.6	36.7	1.000093
34000.0	272.7	-40.1	51.7**	407.7	594.7	263.5	38.6	1.000091
34500.0	266.7	-41.4	38.4**	400.8	593.1	262.5	40.5	1.000090
35000.0	260.8	-42.6	25.1**	394.0	591.6	263.9	41.6	1.000088
35500.0	255.0	-43.8	11.7**	387.3	590.0	265.2	42.7	1.000086
36000.0	249.3	-45.1		380.8	588.3	267.5	44.1	1.000085
36500.0	243.6	-46.6		374.5	586.4	270.0	45.7	1.000083
37000.0	238.0	-48.1		368.4	584.5	271.8	47.6	1.000082
37500.0	232.6	-49.5		362.4	582.6	273.1	49.5	1.000081
38000.0	227.3	-51.0		356.4	580.6	274.4	50.7	1.000079
38500.0	222.1	-52.5		350.6	578.7	275.7	50.4	1.000078
39000.0	217.0	-53.7		344.4	577.1	277.1	50.5	1.000077
39500.0	211.9	-54.2		337.1	576.4	278.9	51.7	1.000075
40000.0	206.9	-54.7		330.0	575.7	280.6	53.1	1.000074
40500.0	202.1	-55.3		323.1	575.0	282.5	55.4	1.000072
41000.0	197.3	-56.0		316.5	574.1	284.2	57.7	1.000070
41500.0	192.6	-56.9		310.3	572.9	285.9	60.6	1.000069
42000.0	188.0	-57.8		304.2	571.7	287.4	63.4	1.000068
42500.0	183.5	-58.7		298.2	570.5	288.7	63.6	1.000066
43000.0	179.2	-59.6		292.3	569.3	290.0	63.8	1.000065

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.



STATION ALTITUDE 3997.30 FEET MSL  
22 SEP. 83 2130 MDT  
ASCENSION NO. 209

UPPER AIR DATA  
2650060209  
S M H

GEODETIC COORDINATES  
32.48034 LAT UEG  
106.42307 LONG UEG

TABLE 9 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup>	SPEED OF SOUND METERS PER SECOND	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
43500.0	174.4	-60.5		286.6	568.1	293.0	59.4	1.000064
44000.0	170.7	-61.4		280.8	566.9	296.4	55.2	1.000063
44500.0	166.5	-62.3		275.0	565.8	297.2	51.6	1.000061
45000.0	162.4	-63.1		269.4	564.6	298.1	48.0	1.000060
45500.0	158.5	-64.0		263.9	563.4	297.6	44.0	1.000059
46000.0	154.6	-64.8		258.6	562.3	296.4	39.9	1.000058
46500.0	150.9	-65.7		253.3	561.1	295.0	35.9	1.000056
47000.0	147.1	-66.6		248.1	559.9	293.5	34.1	1.000055
47500.0	143.4	-67.5		242.9	558.7	291.8	32.4	1.000054
48000.0	139.8	-68.3		237.8	557.6	289.8	31.0	1.000053
48500.0	136.3	-69.2		232.8	556.4	286.9	30.8	1.000052
49000.0	132.9	-70.1		228.0	555.2	284.0	30.6	1.000051
49500.0	129.6	-71.0		223.2	554.0	281.2	30.4	1.000050
50000.0	126.3	-71.8		218.6	552.8	279.1	28.4	1.000049
50500.0	123.1	-72.6		213.9	551.7	276.6	26.5	1.000048
51000.0	120.0	-73.2		209.0	550.9			1.000047
51500.0	116.9	-73.7		204.2	550.2			1.000045
52000.0	113.9	-74.3		199.6	549.4			1.000044

STATION ALTITUDE 3997.30 FEET MSL  
22 SEP. 83  
ASCENSION NO. 209

MANDATORY LEVELS  
2650060209  
S M K

TABLE 10

GEOMETRIC COORDINATES  
32.48034 LAT DEG  
106.42307 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5063.	24.3	4.1	27.		353.9	5.3
800.0	6790.	20.1	3.8	34.		324.4	3.3
750.0	8602.	15.6	2.7	42.		164.5	4.0
700.0	10506.	10.5	.8	51.		177.0	2.5
650.0	12515.	5.4	-1.6	61.		280.5	7.1
600.0	14645.	1.3	-4.7	64.		307.5	7.9
550.0	16928.	-3.8	-6.6	81.		267.4	13.0
500.0	19375.	-8.5	-11.6	78.		295.3	12.0
450.0	22030.	-13.5	-18.5	66.		342.9	11.4
400.0	24941.	-19.7	-22.8	76.		263.7	11.6
350.0	28159.	-25.8	-31.7	57.		278.4	22.9
300.0	31769.	-33.7	-41.5	45.		276.7	31.3
250.0	35061.	-44.9				267.1	43.9
200.0	40618.	-55.5				283.2	56.3
175.0	43379.	-60.5				292.8	59.7
150.0	46489.	-65.9				294.7	55.6
125.0	50065.	-72.2				278.2	27.7

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.